REMARKS

Pending Claims

Claims 1, 4-9 have been canceled, and claim 2 has been amended. Claim 10 has been withdrawn from consideration. Accordingly, claims 2 and 3 are currently pending.

Claim Rejections

Claims 2 and 3 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 has been amended in a manner in which it is submitted satisifies the Examiner's §112 rejection.

Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Uetsuhara et al., U.S. Patent 5,268,662, taken either alone or in view of Hoffman, U.S. Patent 5,546,063. For the reasons set forth hereafter, it is submitted that the claims, as amended, patentably distinguish over the references.

Patentability of the Claims

Claim 2 has been amended to further clarify and define the following essential features of the electromagnet of the present invention:

1) an end face of a plunger of the movable iron core and the stationary iron core, and the steel plate fixed to an end of the movable iron core and the magnetic

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protrusion provided on the side where the movable iron core is inserted, respectively, are opposed to each other in the same direction, i.e., lengthwise of the electromagnet; and

2) the permanent magnet is provided in an area defined by the plunger, the protrusion, the steel plate and the stationary iron core.

Claim 2 has been further amended to define the protrusion as being magnetic. Support for this limitation is found in the specification at page 13, lines 13 and 14.

With respect to the cited Uetsuhara et al. '662 patent, Fig. 18 of this reference fails to disclose the above-identified feature (1) and Fig. 3 fails to disclose feature (2). Moreover, even if Fig. 18 of the '662 patent is construed to include a protrusion, such a construction would not show that the protrusion is opposed to the steel plate in the same direction lengthwise of the electromagnet.

The Hoffman '063 patent was cited for disclosing a magnetic solenoid having a magnetic stationary core assembly with a non-magentic portion attached thereto. Since Applicants' are no longer claiming that the protrusion is formed of a non-magnetic material, the Hoffman reference is no longer relevant.

Since claim 3 depends from claim 2, claim 3 is submitted to be patentable for the same reasons as advanced with respect to claim 2 as well as for the additional limitations contained therein.

Accordingly, it is submitted that claims 2 and 3 now patentably distinguish over the Uetsuhara et al. '662 patent, taken either alone or in combination with the Hoffman '063 patent.

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Conclusion

In view of the foregoing amendments and remarks, Applicants contend that the above-identified application is now in condition for allowance. Accordingly, reconsideration and reexamination is requested.

Respectfully submitted,

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